

the different radio types and their usage

Amateur (ham) radio – No limit on distance, 200 to 1500 watts of power, no limit on antenna elevation. Exam covers regulations, operating practices and radio electronics. Most used freqs – 70cm, 2, 6,10, 20, 40 and 80 meter bands. . Part 97, exam for each of 3 Classes of 10 year license:

CB -Citizens Band – License by rules Section 95, Subpart D, short-distance voice communications service for personal or business activities, the current specification is simply 4-watts output (AM) or 12-watts output (SSB). Just below 10m band.

FRS Family Radio Service – Follow rules, no license required Part 95 subpart B. A FRS transmitter may not be modified and must be certified by the FCC. A certified FRS radio has an identifying label placed on it by the manufacturer. If you operate a radio that has been approved exclusively under the FRS rules, you are not required to have a license. FRS transmitters have a maximum power of ½ watt (500 milliwatt) effective radiated power and integral (non-detachable) antennas. Frequency channels above 70cm band.

GMRS General Mobile Radio Service – Five year license, \$70, 47 C.F.R. Part 95 Subpart A. A GMRS system consists of station operators, a mobile station (often comprised of several mobile units) and sometimes one or more land stations. A small base station is one that has an antenna no more than 20 feet above the ground or above the tree on which it is mounted and transmits with no more than 5 watts ERP. The use of some channels is restricted to certain types of stations. Frequency channels above 70cm band.

MURS Multi Use Radio Service– Follow rules Section 95.1309 Max 2 watts transmitter power output. You may operate a MURS transmitter at any location the FCC regulates radio communications, subject to certain restrictions. A MURS transmitter must be certified by the FCC and is identified by a label placed on it by the manufacturer. Frequency channels above 2m band.

intervention and education before prosecution

Unlicensed or unauthorized transmission in Florida is a felony of the third degree.

The 2016 Florida Statutes

877.27Unauthorized transmissions to, or interference with, a public or commercial radio station licensed by the Federal Communications Commission prohibited; penalties.—

(1)A person may not:

(a)Make, or cause to be made, a radio transmission in this state unless the person obtains a license or an exemption from licensure from the Federal Communications Commission under 47 U.S.C. s. 301, or other applicable federal law or regulation; or

(b)Do any act, whether direct or indirect, to cause an unlicensed radio transmission to, or interference with, a public or commercial radio station licensed by the Federal Communications Commission or to enable the radio transmission or interference to occur.

(2)A person who violates this section commits a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

History.—s. 1, ch. 2004-58.



Columbia Amateur Radio Society
NF4CQ.com
Lake City, Florida

Contact name/phone

How will you communicate across town? To the next city? Next state?



With the Internet down? Cell phones down? Power out?

With Amateur Radio, you can!

Doomsday scenario? No, this can and has happened with tornados, civil unrest and hurricanes.

You have a plan, you've started your preps, complete them with a ham radio license!

When it hits!



The go-bag is packed: emergency supplies of food, clothes, first aid and personal protection have been checked and loaded into the vehicle. You know where to meet up with your group/family. You call to let them know you are leaving and to expect you in 3 hours – except the call does not go through. The destruction is much worse than reported. All cell and landline phones are down and many roads are blocked. You begin to sense that you are not only stranded but also isolated.

There is a solution. Amateur radio has been used in emergencies since it's beginning. Amateur radio can get through when normal communications are down. You can send and receive both voice and digital/text from nearly any location.



What does it take?

Requirements

Must pass exam for each of the three Classes of license: Technician – usually the entry level; General and Extra – these two allow more privileges than Technician. Each exam tests knowledge of operating procedures, regulations and theory. License is valid for 10 years.

Exam/Study

Methods of study available are classes, books and online. Depending upon prior experience and training, the Tech exam can be passed with 20-30 hours of study. The other Classes may take a little more. Morse Code is no longer required for any Class license.

Radio types and Costs

Handheld Transceiver (HT),

Typically 5-8 watts UHF/VHF bands, hundreds of memory channels. Costs are \$30 to \$120. Minimum Tech Class license required.

Mobile Transceiver,

Single, dual or quad bands, 50-100 watts, hundreds of memory channels, cross-band repeater, often used as base station. Costs are \$200-\$500. Used equipment is often a good value. Minimum Tech Class license required.

Base Transceiver,

Multi-band, up to 1500 watts with amplifier. Range can be nation wide as well as world wide. Costs from \$500 up. Power and bands require a General or Extra Class license.

Antenna,

Location and elevation are very important: the higher, the better. The cost for UHF/VHF range from \$20 for mobile to \$60+ for base.

Will you join us?

CARS Columbia Amateur Radio Society

has provided emergency communications in this area for more than 5 decades. The Columbia County club for hams was formed in 1958 to help promote amateur radio, train members on emergency communications procedures and enjoy the hobby with other hams. One of our main purposes is to help new members prepare for and take the FCC exam to become an amateur radio operator. The club holds monthly meetings and is regularly involved in community events – the Air Show, track meets, emergencies - providing communications when normal telephone service fails.

NF4CQ.com is the club's website that provides information of events, alerts and conditions. It is also a place to meet with the forum and shout box.

ARES The Amateur Radio Emergency Service® consists of licensed amateurs who have voluntarily registered their qualifications and equipment, with their local ARES leadership, for communications duty in the public service when disaster strikes.

ARRL The national association of ham radio operators. Mission Statement: To advance the art, science, and enjoyment of Amateur Radio.

**Amateur Radio is...
Science... Service... Skill...
Join us!**